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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/686,572

Applicant(s)

DUBIL ET AL.

Examiner

MYLINH TRAN

Art Unit

2179

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2010.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4, 6, 14, 16-18, 21, 22, 24-26, 29 and 31-33 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 4, 6, 14, 16-18, 21-22, 24-26, 29 and 31-33 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SF-08)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Applicant's Amendment filed 08/02/2010 has been entered and carefully considered. Claims 6, 14, 16, 17, 18, 21-22, 24-26, 29, 31-33 have been amended. However, the limitations of the claims have not been found to be patentable over prior art of record. Therefore, the claims are rejected under the new ground of rejection as set forth in the Office Action mailed 04/15/2010.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 4, 6, 14, 16, 17, 18, 21-22, 24-26, 29, 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kubischta et al. [US. 2002/0042915] in view of Shen et al. [US. 6,401,059].

As to claim 6, Kubischta et al. teach enable a user to specify to a server on the internet at least one apparatus to be controlled by the universal remote (0019, "the EPG displayed on the remote control can be obtained from a network, such as internet"), the server on the internet including a database of code sets (0027, "a database 109 containing schedule information for television programming may be stored within one or more of the headends 104, network centers 106, the Internet 108...The database 109 may include, for example, program channels, dates, times, critical reviews, content ratings, VCRPlus.RTM. codes, and the like"), each apparatus having a corresponding dedicated remote with a control panel (figure 2); enabling the server on the internet to identify a control code corresponding to each specified apparatus and to provide the control code as data in a mark-up language format (0073, "the online EPG 604 can be provided as a hypertext markup language (HTML) file"); providing each identified control code over the internet to a home network, the mark-up language format control code including a code set representative of commands to control a state of the specified apparatus (0024, "an STB 102 receives encoded television signals from the network

100 and decodes the same for display on the television. Additionally, an STB 102 receives commands from a user (via a remote control in one embodiment) and transmits such commands back to the network 100"); Kubischta et al. teach downloading the control code in XML language into the remote control to control the specified apparatus (0073, "the online EPG 604 (and associated television program schedule information) can be provided using other formats and/or protocols, such as file transfer protocol (FTP), transmission control protocol/Internet protocol (TCP/IP), user datagram protocol (UDP), extensible markup language (XML) format,"); the IR/Rf transmission (0032), using the soft keys of the displayed control panel on the touch screen GUI to enable the universal remote to send commands to the specified apparatus via the IR or RF transmission (0032)

Kubischta et al. teach the features of the touch screen GUI to display a graphical representation of the control panel of the dedicated remote of the specified apparatus including buttons (figure 2);

While Kubischta et al. teach the universal remote user interface being as a touch screen display for controlling the specified apparatus, Kubischta et al. do not teach or suggest a display screen including icons and soft keys. However, Shen et al. teach a PDA screen including icons and soft keys (figure 3, column 3, lines 8-12, lines 60-65; column 1, lines 18-40).

Accordingly, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the icons and softkeys as

rendered as a display of Shen et al. to include a feature of the touch screen GUI including buttons to achieve the claimed invention. One would be motivated to make such a combination is to provide the user an easy to use as the user simply touches what he/she sees on the display.

Kubischta et al. do not teach the control code not being usable by the specified apparatus until the control code is converted into the command and transmitted to the apparatus by an IR or RF transmission independent of the internet, wherein the apparatus is not pre-configured to deliver or cause delivery of its respective control code to a control device; enable the universal remote to convert the control code into the associated commands to control the specified apparatus;

However, Shen et al. show the control code being converted into the command and transmitted to the apparatus by an IR transmission independent of the internet (column 3, lines 22-26, "This selection will cause the emulator 216 to send instructions to the television 222 to display the selected TV program. The instructions are sent via an infrared signal outputted through the infrared port 218 of the PDA 210 to the infrared port 224 of the television 222); the control code not being usable by the specified apparatus until the control code is converted into the command (column 2, lines 52-61, "Typically, this information is in the Hypertext Markup Language (HTML) format. However, information displayed using HTML is not structured, i.e., HTML describes how the information is to be displayed but

does not identify the information. Without this identification, the information cannot be directly stored into the database 206. Thus, the software program 204 has the capability to convert the information from the HTML format to a more database-friendly format, such as the Extended Markup Language (XML);

Accordingly, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the IR port of Kubischta et al. to include the transmission from the remote control (PDA) to the apparatus by the IR signal to achieve the claimed invention. One would be motivated to make such a combination is to provide an energy efficient method of communication between two devices.

As to claim 4, Kubischta et al. teach the control code comprising part of an electronic program guide (EPG) (figure 2).

As to claim 14, Kubischta et al. teach enable a user to specify to a server on the internet at least one apparatus to be controlled by the universal remote (0019, "the EPG displayed on the remote control can be obtained from a network, such as internet"), the server on the internet including a database of code sets (0027, "a database 109 containing schedule information for television programming may be stored within one or more of the headends 104, network centers 106, the Internet 108...The database 109 may include, for example, program channels, dates, times, critical reviews, content ratings, VCRPlus.RTM codes, and the like"), each apparatus having a corresponding

dedicated remote with a control panel (figure 2);
enabling the server on the internet to identify a control code corresponding to each specified apparatus and to provide the control code as data in a mark-up language format (figures (0073, "the online EPG 604 can be provided as a hypertext markup language (HTML) file");
Kubischta et al. teach the features of the touch screen GUI to display a graphical representation of the control panel of the dedicated remote of the specified apparatus including buttons in which the buttons for selecting the commands for the selected apparatus are in the same locations as the corresponding buttons of the dedicated remote such that when a user switches between the remote control device and the dedicated remote (0075, "If the user uses the remote control 204 to request the online EPG 604 from the web site 602, then the online EPG 604 is displayed/rendered on the remote display device 220 as the EPG 240, after being processed by the intermediary unit 607. That is, the intermediary unit 607 in the remote control 204 performs various operations on the retrieved HTML file having the online EPG 604 data, such as transcoding to provide the EPG 604 with control functions. These control functions are added because without them, the online EPG 604 is a basic HTML file for viewing only. With transcoding, the HTML file is modified by the intermediary unit 607 such that control functions are added to allow the user to use the remote control's 204 buttons 232 or 234 to select channels from the displayed EPG 240 that was derived from

the original online EPG 604, or to perform manipulation of the displayed EPG information (such as sorting, magnifying, organizing, and the like). Thus, the user can view the displayed EPG 240 on the remote control 204 without interrupting the television program that is being concurrently displayed on the television 202. If the user uses the buttons 232 or 234 to select a channel displayed by the EPG 240, then the transcoded file having control functionality can interpret this activity and identify the selected channel, and trigger transmission of a signal (to be received by the STB 102) to tune to this channel"; the control keys are in the same position as the corresponding keys and icons of the dedicated remote such that when a user switches between the remote control device and the dedicated remote, the control keys are in the same position and have the same function as the dedicated remote (figure 2, 0089, "the present invention provides the EPG 240 on the remote control 204, allowing a user to conveniently select one or more television programs to display on the television 202 or schedule for recording. In one embodiment, a touch screen interface is provided, whereby a user may easily select a program by touching an indication of the program in the EPG 240");

Kubischta et al. teach the features of the touch screen GUI to display a graphical representation of the control panel of the dedicated remote of the specified apparatus including buttons (figure 2);

While Kubischta et al. teach the universal remote user interface being as a

touch screen display for controlling the specified apparatus, Kubischta et al. do not teach or suggest a display screen including icons and soft keys.

However, Shen et al. teach a PDA screen including icons and soft keys (figure 3, column 3, lines 8-12, lines 60-65; column 1, lines 18-40).

Accordingly, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the icons and softkeys as rendered as a display of Shen et al. to include a feature of the touch screen GUI including buttons to achieve the claimed invention. One would be motivated to make such a combination is to provide the user an easy to use as the user simply touches what he/she sees on the display.

Kubischta et al. teach downloading the control code in XML language into the remote control to control the specified apparatus (0073, "the online EPG 604 (and associated television program schedule information) can be provided using other formats and/or protocols, such as file transfer protocol (FTP), transmission control protocol/Internet protocol (TCP/IP), user datagram protocol (UDP), extensible markup language (XML) format,"); the IR/RF transmission (0032), using the soft keys of the displayed control panel on the touch screen GUI to enable the universal remote to send commands to the specified apparatus via the IR or RF transmission (0032).

Kubischta et al. do not teach the control code not being usable by the specified apparatus until the control code is converted into the command and transmitted to the apparatus by an IR or RF transmission independent of the

internet, wherein the apparatus is not pre-configured to deliver or cause delivery of its respective control code to a control device; enable the universal remote to convert the control code into the associated commands to control the specified apparatus; using the soft keys of the displayed control panel on the touch screen GUI to enable the universal remote to send commands to the specified apparatus via the IR or RF transmission. However, Shen et al. show the control code being converted into the command and transmitted to the apparatus by an IR transmission independent of the internet (column 3, lines 22-26, "This selection will cause the emulator 216 to send instructions to the television 222 to display the selected TV program. The instructions are sent via an infrared signal outputted through the infrared port 218 of the PDA 210 to the infrared port 224 of the television 222); the touch screen GUI to display a graphical representation of the control panel of the dedicated remote of the specified apparatus (figure 3) including icons and soft keys (column 2, line 40 through column 3, line 16) in which keys and icons for selecting the commands for the selected apparatus are in the same locations as the corresponding keys and icons of the dedicated remote (column 2, lines 40-65) such that when a user switches between the remote control device and the dedicated remote, the control keys are in the same position as the corresponding keys and icons of the dedicated remote such that when a user switches between the remote control device and the dedicated remote, the control keys are in the

same position and have the same function as the dedicated remote (figures 2-3, 0089, "the present invention provides the EPG 240 on the remote control 204, allowing a user to conveniently select one or more television programs to display on the television 202 or schedule for recording. In one embodiment, a touch screen interface is provided, whereby a user may easily select a program by touching an indication of the program in the EPG 240"); wherein the apparatus is not pre-configured to deliver or cause delivery of its respective control code to a control device (column 2, lines 52-67); the control code not being usable by the specified apparatus until the control code is converted into the command (column 2, lines 52-61, "Typically, this information is in the Hypertext Markup Language (HTML) format. However, information displayed using HTML is not structured, i.e., HTML describes how the information is to be displayed but does not identify the information. Without this identification, the information cannot be directly stored into the database 206. Thus, the software program 204 has the capability to convert the information from the HTML format to a more database-friendly format, such as the Extended Markup Language (XML)"; Accordingly, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the IR port of Kubischta et al. to include the transmission from the remote control (PDA) to the apparatus by the IR signal to achieve the claimed invention. One would be motivated to make such a combination is to provide an energy efficient

method of communication between two devices.

As to claim 16, Kubischta et al. teach code for controlling consumer electronics (CE) equipment and for being supplied as data in an extensible mark-up language (XML) format (0073, "the online EPG 604 (and associated television program schedule information) can be provided using other formats and/or protocols, such as file transfer protocol (FTP), transmission control protocol/Internet protocol (TCP/IP), user datagram protocol (UDP), extensible markup language (XML) format");

and rendering a control key layout as a graphical representation image of buttons on a graphical user interface (GUI) of the universal programmable remote control device that emulates a key layout of a dedicated remote control device for the CE equipment (0075, "If the user uses the remote control 204 to request the online EPG 604 from the web site 602, then the online EPG 604 is displayed/rendered on the remote display device 220 as the EPG 240, after being processed by the intermediary unit 607. That is, the intermediary unit 607 in the remote control 204 performs various operations on the retrieved HTML file having the online EPG 604 data, such as transcoding to provide the EPG 604 with control functions. These control functions are added because without them, the online EPG 604 is a basic HTML file for viewing only. With transcoding, the HTML file is modified by the intermediary unit 607 such that control functions are added to allow the user to use the remote control's 204 buttons 232 or 234 to select channels from

the displayed EPG 240 that was derived from the original online EPG 604, or to perform manipulation of the displayed EPG information (such as sorting, magnifying, organizing, and the like). Thus, the user can view the displayed EPG 240 on the remote control 204 without interrupting the television program that is being concurrently displayed on the television 202. If the user uses the buttons 232 or 234 to select a channel displayed by the EPG 240, then the transcoded file having control functionality can interpret this activity and identify the selected channel, and trigger transmission of a signal (to be received by the STB 102) to tune to this channel").

While Kubischta et al. teach the universal remote user interface being as a touch screen display for controlling the specified apparatus, Kubischta et al. do not teach or suggest a display screen including icons and soft keys.

However, Shen et al. teach a PDA screen including icons and soft keys (figure 3, column 3, lines 8-12, lines 60-65; column 1, lines 18-40).

Accordingly, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the icons and softkeys as rendered as a display of Shen et al. to include a feature of the touch screen GUI including buttons to achieve the claimed invention. One would be motivated to make such a combination is to provide the user an easy to use as the user simply touches what he/she sees on the display.

Kubischta et al. do not teach or suggest the control code for being converted via an extensible stylesheet language (XSL) application into commands for

installation and local processing on a universal programmable remote control device, the installed and locally processed commands representing an infra-red (IR) or radio-frequency (RF) signal for transmission by the universal programmable remote control device to the CE equipment.

However, Shen et al. teach the limitation at column 2, lines 52-65.

Accordingly, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the IR port of Kubischta et al. to include the transmission from the remote control (PDA) to the apparatus by the IR signal to achieve the claimed invention. One would be motivated to make such a combination is to provide an energy efficient method of communication between two devices.

As to claim 17, Kubischta et al. teach enabling each of a plurality of users to specify to a server, over the bidirectional data network, a user specified apparatus for being controlled by a universal programmable remote control device of a user (0019, "the EPG displayed on the remote control can be obtained from a network, such as internet"); enabling the server to identify extensible mark-up language (XML) tags that specify control codes included in data in XML language format (0073, "the online EPG 604 (and associated television program schedule information) can be provided using other formats and/or protocols, such as file transfer protocol (FTP), transmission control protocol/Internet protocol (TCP/IP), user datagram protocol (UDP), extensible markup language (XML) format,,"; Kubischta et al. do not teach the

control code not being usable by the specified apparatus until the control code is converted into the command and transmitted to the apparatus by an IR or RF transmission independent of the internet, wherein the apparatus is not pre-configured to deliver or cause delivery of its respective control code to a control device; enable the universal remote to convert the control code into the associated commands to control the specified apparatus;

However, Shen et al. show the control code being converted into the command and transmitted to the apparatus by an IR transmission independent of the internet (column 3, lines 22-26, "This selection will cause the emulator 216 to send instructions to the television 222 to display the selected TV program. The instructions are sent via an infrared signal outputted through the infrared port 218 of the PDA 210 to the infrared port 224 of the television 222); the control code not being usable by the specified apparatus until the control code is converted into the command (column 2, lines 52-61, "Typically, this information is in the Hypertext Markup Language (HTML) format. However, information displayed using HTML is not structured, i.e., HTML describes how the information is to be displayed but does not identify the information. Without this identification, the information cannot be directly stored into the database 206. Thus, the software program 204 has the capability to convert the information from the HTML format to a more database-friendly format, such as the Extended Markup Language (XML)");

Accordingly, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the IR port of Kubischta et al. to include the transmission from the remote control (PDA) to the apparatus by the IR signal to achieve the claimed invention. One would be motivated to make such a combination is to provide an energy efficient method of communication between two devices.

While Kubischta et al. teach the features of the touch screen GUI to display a graphical representation of the control panel of the dedicated remote of the specified apparatus including buttons (figure 2) and Kubischta et al. teach the universal remote user interface being as a touch screen display for controlling the specified apparatus, Kubischta et al. do not teach or suggest a display screen including icons and soft keys. However, Shen et al. teach a PDA screen including icons and soft keys (figure 3, column 3, lines 8-12, lines 60-65; column 1, lines 18-40).

Accordingly, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the icons and softkeys as rendered as a display of Shen et al. to include a feature of the touch screen GUI including buttons to achieve the claimed invention. One would be motivated to make such a combination is to provide the user an easy to use as the user simply touches what he/she sees on the display.

As to claim 18, Kubischta et al. providing control codes in an extensible mark-up language (XML) format (0073) to a home network including a

universal programmable remote control device, the universal remote user interface being as front panel display for controlling the specified apparatus (0045, "the remote display device 220 may provide touch sensitivity"), While Kubischta et al. teach the universal remote user interface being as a touch screen display for controlling the specified apparatus, the control codes including a first set of control codes with rendering instructions for rendering a graphical representation image of buttons on a GUI touch screen (0075, "If the user uses the remote control 204 to request the online EPG 604 from the web site 602, then the online EPG 604 is displayed/rendered on the remote display device 220 as the EPG 240, after being processed by the intermediary unit 607"); the graphical representation image on the GUI touch screen emulates a key layout of a dedicated remote control device for a consumer electronics (CE) equipment (figures 2-3, 0089, "the present invention provides the EPG 240 on the remote control 204, allowing a user to conveniently select one or more television programs to display on the television 202 or schedule for recording. In one embodiment, a touch screen interface is provided, whereby a user may easily select a program by touching an indication of the program in the EPG 240"); Kubischta et al. do not teach or suggest a display screen including icons and soft keys. However, Shen et al. teach a PDA screen including icons and soft keys (figure 3, column 3, lines 8-12, lines 60-65; column 1, lines 18-40). Accordingly, it would have been obvious to one of ordinary skill in the art, at

the time the invention was made, to have modified the icons and softkeys as rendered as a display of Shen et al. to include a feature of the touch screen GUI including buttons to achieve the claimed invention. One would be motivated to make such a combination is to provide the user an easy to use as the user simply touches what he/she sees on the display.

Kubischta et al. do not show a second set of control codes representing commands suitable for transmission by the control device over an IR or RF network to a CE equipment to control the state of the CE equipment, the control codes being provided from a database over a bidirectional data network to the home network, wherein the equipment is not preconfigured to deliver or cause delivery of its respective control code to the control device. However, Shen et al. show the control code being converted into the command and transmitted to the apparatus by an IR transmission independent of the internet (column 3, lines 22-26, "This selection will cause the emulator 216 to send instructions to the television 222 to display the selected TV program. The instructions are sent via an infrared signal outputted through the infrared port 218 of the PDA 210 to the infrared port 224 of the television 222); wherein the apparatus is not pre-configured to deliver or cause delivery of its respective control code to a control device (column 2, lines 52-67); the control code not being usable by the specified apparatus until the control code is converted into the command, the control codes for being converted via an extensible mark-up language application

into commands for installing and local processing on the universal programmable remote control device; an (extensible stylesheet language) XSL style sheet (column 2, lines 52-61, "Typically, this information is in the Hypertext Markup Language (HTML) format. However, information displayed using HTML is not structured, i.e., HTML describes how the information is to be displayed but does not identify the information. Without this identification, the information cannot be directly stored into the database 206. Thus, the software program 204 has the capability to convert the information from the HTML format to a more database-friendly format, such as the Extended Markup Language (XML)";

Accordingly, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the IR port of Kubischta et al. to include the transmission from the remote control (PDA) to the apparatus by the IR signal to achieve the claimed invention. One would be motivated to make such a combination is to provide an energy efficient method of communication between two devices.

As to claims 21 and 26, Kubischta et al. teach the bidirectional data network including the internet and the source being located on the internet and remote from the selected apparatus and the bidirectional data network (0019).

As to claims 22 and 24, Shen et al. disclose the bidirectional data network including the internet, the plurality of home networks each being connected

with the internet to receive control codes requested from the database over the internet; the user specifying the apparatus to be controlled over the internet to the server, which server is remote from and not a part of the home network or the specified apparatus, and the control codes being sent via the internet to the home network to the universal programmable remote control device (figures 1A-1B).

As to claim 25, Kubischta et al. disclose the database being remote from and not a part of the home network and not a part of the CE equipment (0027).

As to claim 29, Kubischta et al. teach on a touch screen GUI display element, generating a graphical representation depicting the dedicated remote control device for the specified apparatus (0045).

As to claim 31, Kubischta et al. teach the database being in communication over a bidirectional data network with a plurality home network systems each of which includes at least a universal programmable remote control device (abstract), the control codes being deliverable to the remote control devices independent of the controlled apparatuses (0019, "the EPG displayed on the remote control can be obtained from a network, such as internet"); the control codes being described as data in XML format with tags which define (1) control parameters including one or more of protocol type (0073, "the online EPG 604 (and associated television program schedule information) can be provided using other formats and/or protocols, such as file transfer protocol

(FTP), transmission control protocol/Internet protocol (TCP/IP), user datagram protocol (UDP), extensible markup language (XML) format,") and (2) at least one of : a type of the controlled apparatus and a brand name of the controlled apparatus (0047).

Kubischta et al. teach a GUI display panel and soft key locations which when rendered on the GUI display panel display buttons in the same position and with common functions as control keys of a dedicated remote control device for corresponding controlled apparatus (figures 2-3, 0089, "the present invention provides the EPG 240 on the remote control 204, allowing a user to conveniently select one or more television programs to display on the television 202 or schedule for recording. In one embodiment, a touch screen interface is provided, whereby a user may easily select a program by touching an indication of the program in the EPG 240");

control codes for controlling apparatuses through remote control devices, the control codes representative of commands suitable for use by the universal programmable remote control devices to control the apparatus over an IR (infra-red) or RF (radio-frequency) network (0033, "the STB 102 also includes a transmitter 212, such as an IR or RF transmitter 212. The transmitter 212 is configured, in one embodiment, to broadcast various types of information to the remote control 204, such as television program schedule information"). While Kubischta et al. teach the universal remote user interface being as a touch screen display for controlling the specified apparatus, the control codes

including a first set of control codes with rendering instructions for rendering a graphical representation image of buttons on a GUI touch screen (0075, "If the user uses the remote control 204 to request the online EPG 604 from the web site 602, then the online EPG 604 is displayed/rendered on the remote display device 220 as the EPG 240, after being processed by the intermediary unit 607"); the graphical representation image on the GUI touch screen emulates a key layout of a dedicated remote control device for a consumer electronics (CE) equipment (figure 2).

Kubischta et al. do not teach or suggest a display screen including icons and soft keys. Kubischta do not teach the control codes still further for being converted via an XSL application into commands for installation and local processing on the universal programmable remote control device.

However, Shen et al. teach a PDA screen including icons and soft keys (figure 3, column 3, lines 8-12, lines 60-65; column 1, lines 18-40); the control codes still further for being converted via an XSL application into commands for installation and local processing on the universal programmable remote control device (column 2, lines 52-65, "this information is in the Hypertext Markup Language (HTML) format. However, information displayed using HTML is not structured, i.e., HTML describes how the information is to be displayed but does not identify the information. Without this identification, the information cannot be directly stored into the database 206. Thus, the software program 204 has the capability to convert the

information from the HTML format to a more database-friendly format, such as the Extended Markup Language (XML)").

Accordingly, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the icons and softkeys as rendered as a display of Shen et al. to include a feature of the touch screen GUI including buttons to achieve the claimed invention. One would be motivated to make such a combination is to provide the user an easy to use as the user simply touches what he/she sees on the display.

Kubischta et al. do not teach the control code being converted into the command and transmitted to the apparatus by an IR transmission independent of the internet. Shen et al. show the control code being converted into the command and transmitted to the apparatus by an IR transmission independent of the internet (column 3, lines 22-26, "This selection will cause the emulator 216 to send instructions to the television 222 to display the selected TV program. The instructions are sent via an infrared signal outputted through the infrared port 218 of the PDA 210 to the infrared port 224 of the television 222); wherein the apparatus is not pre-configured to deliver or cause delivery of its respective control code to a control device (column 2, lines 52-67).

Accordingly, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the IR port of Zintel et al. to include the transmission from the remote control (PDA) to the apparatus

by the IR signal to achieve the claimed invention. One would be motivated to make such a combination is to provide an energy efficient method of communication between two devices.

As to claim 32, Shen et al. teach rendering each icon or soft button in a same relative location as a corresponding control keys of the dedicated remote control device for the specified apparatus which perform the same function (column 2, line 40 through column 3, line 16). Accordingly, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the front panel display of Kubischta et al. to include the feature of the touch screen GUI including icons and soft keys of Shen to achieve the claimed invention. One would be motivated to make such a combination is to provide the user an easy to use as the user simply touches what he/she sees on the display.

As to claim 33, Kubischta et al. teach a touch screen display (0045); an infra-red (IR) or radio-frequency (RF) transmitter (0032); a memory; an interface; a processor programmed (0056) to receive an input indicative of a consumer appliance to be controlled (see abstract), control the interface to go via the internet to a webist (0019 "the EPG displayed on the remote control can be obtained from a network, such as internet") and retrieve (1) IR or RF (0032) control codes as data in an extensible mark-up language (XML) format for the consumer appliance to be controlled (0073, "the online EPG 604 can be provided as a hypertext markup language (HTML) file") and (2) a

description as data in an XML format of a key pad layout corresponding to the dedicated remote control device for the consumer appliance to be controlled (figure 2, "keypad layout");

control the touch screen display via a corresponding stored key pad layout command to display button depicting the key pad layout corresponding to the dedicated remote control device for the consumer appliance to be controlled (0045-0047), and in response to one of the buttons displayed on the touch screen display being touched (0075), controlling the IR or RF transmitter to transmit a corresponding stored IR or RF control code command represented by the touched buttons (0075), wherein the universal programmable remote control device emulates the dedicated remote controls device for a corresponding one or more controlled consumer appliances (see abstract).

Kubischta et al. do not teach or suggest the feature of converting the retrieved IR or RF control codes and key pad layout description via an XML application into commands for installation and local processing on the universal programmable remote control device and store the converted IR or RF control codes and the key pad layout description in the memory. Shen et al. teach converting the retrieved IR or RF control codes and key pad layout description via an XML application into commands for installation and local processing on the universal programmable remote control device and store the converted IR or RF control codes and the key pad layout (figure 3, column 2, lines 52-65) description in the memory (column 2, lines 40-52); the

control code not being usable by the specified apparatus until the control code is converted into the command (column 2, lines 52-61, "Typically, this information is in the Hypertext Markup Language (HTML) format. However, information displayed using HTML is not structured, i.e., HTML describes how the information is to be displayed but does not identify the information. Without this identification, the information cannot be directly stored into the database 206. Thus, the software program 204 has the capability to convert the information from the HTML format to a more database-friendly format, such as the Extended Markup Language (XML)");

While Kubischta et al. teach the universal remote user interface being as a touch screen display for controlling the specified apparatus, Kubischta et al. do not teach or suggest a display screen including icons and soft keys. However, Shen et al. teach a PDA screen including icons and soft keys (figure 3, column 3, lines 8-12, lines 60-65; column 1, lines 18-40).

Accordingly, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the icons and softkeys as rendered as a display of Shen et al. to include a feature of the touch screen GUI including buttons to achieve the claimed invention. One would be motivated to make such a combination is to provide the user an easy to use as the user simply touches what he/she sees on the display.

Response to Arguments

Applicant has stated that it is unknown how the PDA touch screen of Shen could be interpreted to read on configuring a universal programmable remote control device. However, the examiner respectfully disagrees with the above argument because Kubischta et al. teach a remote control controlling multiple devices as recited at paragraph 0042 "control buttons 234 may also be provided on the remote control 204 to control the operation of the STB 102 and/or the television 202. The control buttons 234 may include channel selection, volume adjustment, power on/off, brightness, contrast, and coloration, and the like. The control buttons 234 may also be configured to control other devices, such as the VCR 205, a digital video disc (DVD) player, a compact disc (CD) player, a tuner, an amplifier, or a receiver" while Shen teaches a remote control controlling multiple devices as recited at column 1, lines 58-62, "The personal digital assistant receives the program information from a source and selects a program based upon the program information. In the preferred embodiment, the device includes a television and a video cassette recorder."

Applicant's arguments with respect to claims 6, 14, 16, 17, 18, 21-22, 24-26, 29, 31-33 have been considered but are moot in view of new ground of rejection.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mylinh Tran. The examiner can normally be reached on Mon - Thu from 7:00AM to 3:00PM at 571-272-4141.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo, can be reached at 571-272-4847.

The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

571-273-8300

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mylinh Tran
Art Unit 2179

/Ba Huynh/
Primary Examiner, Art Unit 2179